REQUEST FOR RETURN OF COPYRIGHT DEPOSITS

JAN 27 1925

Dated at Washington D C

January 23, 1925

Register of Copyrights,
Library of Congress,
Washington, D. C.

Dear Sir:

The undersigned claimant of copyright in the work herein named, deposited in the Copyright Office and duly registered for copyright protection, requests the return to him under the provisions of sections 59 and 60 of the Act of March 4, 1909, of ~~XXXXX~~ both of the deposited copies of the Ford Motion Picture Lab. films entitled " Sugar " (Film # 57, two prints) deposited in the Copyright Office on January 23, 1925 and registered under Class ....., XXc., No. M 2859.

If this request can be granted you are asked and authorized to send the said copy or copies to me at the following address: Ford Motor Company 451 Penna Ave Washington D C (Will Call) or to .....

at .....

Signed Ford Motor Company by Adv. Dept. [signature]
(Claimant of Copyright)

(Sept., 1922—500)

Received two copies of the above film

Ford Motor Company

By [signature]

JAN 29 1925

Ford Educational Library

Agriculture

(57) Sugar ~~Cane~~

Produced & Distributed by

Ford
MOTION PICTURE
LABORATORIES
DETROIT, MICHIGAN

Ford Educational Library

Agriculture

(57) Sugar Cane

GENERAL STATEMENT.

The sugar cane fields of this country are almost entirely in the rich soil of Southern Louisiana. This area has one-third of the sugar production in the United States. The larger amount of the sugar comes from the scattered sugar beet regions. In the production of cane-sugar, the United States produces about one-half as much as the Hawaiian Islands and less than one-eighth of Cuba's sugar production.

Sugar cane has long been cultivated for the sweet juice and it is referred to in the Bible as "the honey bearing reed." Cane-sugar was for a long time the main source of sugar in this country.

Sugar in abundance is relatively new. This change is due largely to the machinery used in manufacturing. Sugar was formerly a luxury but now it is a necessity. In the United States about ninety-eight pounds of sugar per capita is consumed. Sugar is the only article in our diet that is entirely digestible. It is an energy-producing food.

This pictorial study of cane-sugar is complete in detail from the planting of the cane to the refining of the raw sugar into the fine white crystal product.

FILM PRESENTATION.

This pictorial study is best presented to a class, if they have had some preliminary preparation. The problems and questions should be carefully worked out and discussed by the class. Some of the references should be read. The teacher should be thoroughly familiar with all of the film titles and the comments which relate to the different scenes. The first showing of the film should be largely in the nature of stimulation of interest in sugar. If this is followed by several meetings for class discussions, then an excellent review is obtained if the film is shown again.

QUESTIONS AND PROBLEMS

1. Estimate the amount of sugar consumed in your family in one week? In one year?
2. Name the different sources of sugar.
3. Describe the sugar cane.
4. What is the best climate and soil for the cultivation of the sugar cane?
5. How is the land prepared for planting?
6. Describe the simple method of planting a field of sugar cane.
7. Describe the method of cultivation.
8. How is the cane harvested?
9. Describe some of the difficulties in harvesting the ripe cane.
10. What is the first step in making sugar from cane?
11. Why is the raw sugar shipped to refineries?
12. What is a vacuum pan?
13. How is the sugar purified?
14. How is the sugar separated from the syrup?
15. Find out how loaf sugar is made.
16. Why is sugar no longer a luxury?
17. Give some of the history relating to sugar.

REFERENCES

1. Sugar Industry—Browne.
2. The Story of Food—Crissey.
3. Atlas of World's Agriculture—Finch and Baker.
4. The Story of Sugar—Fisk.
5. The Manufacture of Cane Sugar—Jones and Scard.
6. Searchlight on American Industries—Mills.
7. The Story of Sugar—Reiter.
8. The World's Food Resources—Smith.
9. The Story of Sugar—Surface.

TITLES OF SCENES.

(The heavy type is the film title for the scene. In the brackets beneath the title are a few comments to make clear the action of the scene. These comments may be used while the film is being shown if the teacher so desires.)

The first cane-sugar was made in China many centuries ago. Shortly after the discovery of America, sugar cane cultivation began in the West Indies, which now produces more than one-fourth of the world's sugar. Southern Louisiana is the sugar cane center of the United States.

(Sugar was once a great luxury and it was considered of great medicinal value. The first large supplies of sugar were obtained from the sugar cane. Today beet-sugar competes with the cane. Sugar is the only important food raised both in the temperate and tropical regions.)

The sugar cane field in the rich soil, warm temperature and rainfall of Louisiana. This growth is over 15 feet high.

(The sugar cane requires a rich soil, a temperature of 75 degrees the year around and a rainfall of 60 inches. The sugar cane grows in a single stalk as seen here, and often reaches a height of 15 feet or more.)

To grow the sugar cane, the rich level land is plowed and trenched.

(Cane cultivation does not require careful work, and rough land may be converted into sugar fields very rapidly by the tractor. The soils free from stones and well drained are most suitable.)

The trenches are five feet apart and form the rows.
(The soil is trenched after being pulverized. The tractor enables the land to be worked rapidly when the soil is in the best condition.)

The "seeds" are the small sprouts from the old canes.
(On the stem of the sugar cane at each node, are the small buds. A piece of the stem, when placed in the ground, will sprout and produce a new plant. The real seeds are very seldom used. Why?)

Pulling out the sprouts for seeds.
(The stems remaining in the soil are pulled out and used for seed.)

Loading the sprouts and carting them to the trenches.
(The pieces of stem are thrown into the wagon and carried to the planting field which has been made ready by trenching.)

Placing the sprouted canes lengthwise in the trenches.
(The planting takes place early in the spring. The trenches run the entire length of the fields.)

The trench is 8 to 12 inches deep.
(This shows the sprouted cane in the bottom of the trench. The cuttings are sometimes laid crosswise but most commonly lengthwise of the trench.)

The old way of covering the sprouts.
(The old way was with a mule and a plow, the soil was turned over the canes in the trenches. In the Louisiana region the fields are carefully drained by a ditch between the rows.)

Power covering.
(In all of the cane fields today, the tractor is used to cover the rows of cane. This is cheaper and quicker.)

The first hoeing of the new cane.
(In a few days the buds on the stem swell and young sprouts from the cane appear. The cane is hoed to keep down the weeds and grass. After the cane fields are planted and hoed twice they are given very little attention.)

From one planting the roots produce canes for two or three seasons.
(The cane will yield a crop for several seasons from one planting. In Louisiana, however, the cane is planted every two years.)

The cane grows rapidly and after two hoeings it receives no further cultivation.
(This is the hardest part of the planting. The canes have to be thinned out and the soil loosened about the roots.)

In 18 months, the cane has grown 18 feet.
(Under ordinary conditions the cane grows rapidly. The crop requires comparatively little labor while it grows.)

Using a heavy knife, the cane is cut close to the ground.
(The cane cutter uses a heavy knife or "machete." In cutting, the leaves are stripped from each stalk and loaded on trucks or on the ox-carts, and carried to the railroad or the crushing mill.)

Many laborers are necessary, as the cane must be harvested quickly when it is ripe.
(Cane-cutting machines are used to some extent, otherwise the large cane plantations employ scores of cutters.)

It is hot and heavy labor.
(Each cutter works on a long row, cutting close to the ground and stripping off the leaves with the hook on the back of the knife. The stalks are thrown into a pile to be loaded and carried to the mill.)

Ripe cane is full of sweet juice.
(The cane is full of the sweet colorless juice. Children in the sugar cane fields always like the taste of this sweet juice.)

This load of cane, fresh from the fields, will make 120 pounds of white sugar.
(It requires about one ton of cane to make 120 pounds of sugar. One acre produces about 19 tons of the cane.)

The easiest way to obtain a supply of sugar.
(The appeal of sugar is universal. Its taste is always relished by the young.)

The juice is obtained by crushing the cane between heavy rollers.
(The cane is washed and then it passes between heavy rollers which force out the sweet juice. The remaining pulp is used for various purposes, generally it is burned as a fuel.)

The first boiling of the juice makes coarse crystals of brown sugar and molasses.
(The raw juice is boiled in vacuum pans at low temperature to prevent burning the sugar and also to save fuel.)

The raw brown sugar is shipped to the refineries in New York and Philadelphia to be purified.
(The final step in sugar making is done in the large factories, so that the raw brown sugar must be shipped to the large refineries.)

Vessels from Cuba and Louisiana discharge cargoes of raw sugar at the refinery.
(Brown sugar is received at refinery plants. It is full of impurities which will be removed by refining.)

Loading bags of raw sugar.
(All raw sugar raised in this country is consumed here. In addition, we import large quanti ties from Cuba, Porto Rico and the Hawaiian Islands.)

Taking samples of the raw sugar for testing.
(Each bag of sugar is sampled and tested. The samples are taken by the United States officials to determine the import duty.)

The raw coarse sugar is crushed and dissolved in water.
(This puts the sugar in liquid form so that it can be easily handled in the refinery.)

Separating the sugar crystals from the sugar solution.
(The sugar crystals are removed from the sugar solution by centrifugal force.)

The sugar crystals are made into syrup in the melting pan.
(The sugar crystals are now melted and dissolved in warm water.)

The impurities are removed from the syrup in bag filters.
(To remove the many impurities filter bags are used.)

The dark color of the syrup is removed in the char filters.
(The dark colored sugar is passing through the large cylindrical filters that are about 30 feet high. They contain charcoal and remove the color from the sugar. The sugar streams out from the bottom of the filter clear and bright.)

The sugar syrup before and after filtering.
(It is necessary to filter the sugar syrup several times to obtain these results.)

The colorless syrup is pumped to the vacuum tank where evaporation occurs.
(In the vacuum pan or tank the sugar is boiled at low temperature which prevents burning. This boiling and evaporating causes the sugar to crystallize. This is one of the most important steps in sugar making.

Each tank holds 3,000 gallons of syrup, which is slowly boiled until it grains or crystallizes. Watching the sugar for crystallization.
(This requires skill and care. The crystals must be of the desired size and the sugar must not be scorched.)

The sugar crystals are dumped into a mixer.
(When the mass of sugar has been formed into crystals, the contents of the vacuum tank are emptied into the mixer. The revolving paddles prevent the warm sugar from becoming solid.)

Separating the sugar crystals from the remaining syrup by whirling.
(The sugar crystals are covered by some of the remaining syrup which did not crystallize This syrup is separated from the crystals in this centrifugal machine.)

The damp sugar is carried from the centrifugal to be dried by hot air in the revolving drum.
(The sugar crystals are washed with water to remove any trace of the syrup, then dumped into a carrier which conveys the sugar to the dryer. A heated current of air absorbs the excess moisture.)

The dry white sugar is stored in bins until packed for shipment.
(The white sugar is now dry, graded and placed in storage.)

For loaf sugar, the white sugar is melted.
(Melting enables the sugar to be formed into a solid mass on cooling.)

Drying and cutting the sugar plates.
(After the plates of sugar have dried, they are cut into small cubes of sugar.)

Packing the cubes of sugar.
(Sugar is packed in various size packages and not opened until it reaches the home.)

Loaf sugar, once a luxury, is now common in every home. The old loaf sugar and the new.
(In former days the loaf sugar was made by draining the sugar syrup through a small clay cone. The modern loaf sugar is made under the most sanitary conditions and it is nearly 100 per cent pure.)

This document is from the Library of Congress
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Collections Summary:

The Motion Picture Copyright Descriptions Collection, Class L and Class M, consists of forms, abstracts, plot summaries, dialogue and continuity scripts, press kits, publicity and other material, submitted for the purpose of enabling descriptive cataloging for motion picture photoplays registered with the United States Copyright Office under Class L and Class M from 1912-1977.

Class L Finding Aid:
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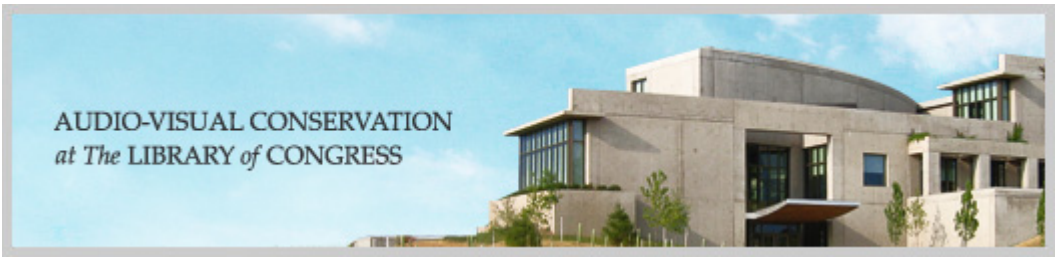
Class M Finding Aid:
https://hdl.loc.gov/loc.mbrsmi/eadmbrsmi.mi021002



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